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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,252

06/09/2005

Dirk A Heerding

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EXAMINER

HAVLIN, ROBERT H

ART UNIT

PAPER NUMBER

1609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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31 DAYS

04/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/538,252

Applicant(s)

HEERDING ET AL.

Examiner

Robert Havlin

Art Unit

1609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-16, 27, 28 and 44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-10, 14-16, 27, 28 and 44 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1609

DETAILED ACTION

Claims 1-10, 14-16, 27-28, and 44 are currently pending.

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-3 and 10, drawn to a product of Formula I, wherein R1-4 does not contain a heterocyclic group and AR is a substituted six membered heterocyclic group.

Group II, claim(s) 1-3 and 10, drawn to a product of Formula I, wherein R1-4 does contain a heterocyclic group and is not encompassed in group I above.

Group III, claim(s) 44, drawn to intermediate products.

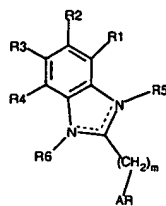
Group IV-V, claim(s) 15, drawn to a method of making products of groups I or II respectively.

Group VI-VII, claim(s) 4-9, 14, and 16, drawn to a method of using products of groups I or II respectively for treating a mammal.

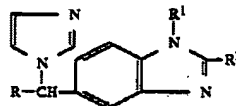
Group VIII-IX, claim(s) 27 and 28, drawn to a method of using products of groups I or II respectively for enhancing survival of cells.

2. The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Art Unit: 1609



The core structure of formula I is (I), which is known in the art. For example US 4,859,684 teaches the numerous compounds falling into the genus of formula I



No. R	R ¹	R ²	salt/base	mp (°C.)
40 H	H	(3-pyridinylmethyl)	3 HCl	254.5
41 H	H	1-CH ₃ O-C ₆ H ₄	base	183.3
42 H	H	3-CH ₃ O-C ₆ H ₄	base	169.7
43 H	H	(2-pyridinylmethyl)	3 HCl, 1 H ₂ O	222.2
44 H	H	n-C ₆ H ₁₃	2 (COOH) ₂ , 1 H ₂ O	101.8
45 H	H	(4-pyridinyl)CH=CH	base, E-form	234.1
46 H	H	(3-pyridinyl)CH=CH	3 HCl, H ₂ O	270.3
47 H	H	1-tienyl	base	196.4
48 H	H	(1H-imidazol-5-yl)-CH=CH	3 HCl, 1 H ₂ O	237.0
49 C ₆ H ₅	H	4-CH ₃ O-C ₆ H ₄	base	234.5
50 H	H	2-CH ₃ -C ₆ H ₄	2 (COOH) ₂	176.0
51 H	H	4-thiazolyl	2 HCl, 2 H ₂ O	147.6
52 H	H	3-quinolyl	base	> 300
53 H	H	2-NH ₂ -3-pyridinyl	base	267.5
54 C ₂ H ₅	H	C ₆ H ₅	base	203.7
55 C ₂ H ₅	H	4-F-C ₆ H ₄	base	197.4
56 i-C ₄ H ₉	H	4-F-C ₆ H ₄	base	187.9
57 n-C ₄ H ₉	H	C ₆ H ₅	base	153.4
58 CH ₃	H	4-F-C ₆ H ₄	base	191.1
59 i-C ₄ H ₉	H	C ₆ H ₅	1 1/2 (COOH) ₂ , 1 H ₂ O	105.5
60 CH ₃	H	C ₆ H ₅	base	196.2
61 n-C ₆ H ₅	H	4-F-C ₆ H ₄	base	163.8
62 CH ₃	CH ₃	C ₆ H ₅	2 (COOH) ₂	144.6
63 CH ₃	CH ₃	4-F-C ₆ H ₄	2 (COOH) ₂	151.0

including the table from page 38:

Therefore, the technical feature linking the claims does not constitute a special technical feature under PCT Rule 13.2. Accordingly, the claims lack unity of invention, and restriction is proper.

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Art Unit: 1609

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product

Art Unit: 1609

are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

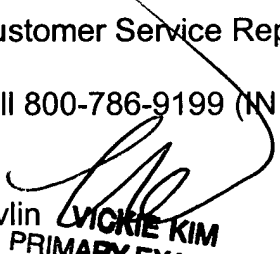
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Havlin whose telephone number is (571) 272-9066. The examiner can normally be reached on Mon. - Fri., 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, Cecilia Tsang can be reached at (571)-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1609

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert Havlin
Examiner **VICKIE KIM**
PRIMARY EXAMINER

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